

What is claimed is:

1. A solid-state imaging device block comprising:

a metal plate having a flat surface, a backside surface opposite to said flat surface, a projected surface projected by a predetermined height from said flat surface, said projected surface being parallel to said flat surface, and at least one opening formed on said projected surface and accessible through said backside surface; and

a solid-state imaging device having a front surface for receiving light and a back surface, said imaging device being secured to said metal plate by adhesive applied at least to a corner edge portion formed by the inner circumferential surface of said at-least-one opening of the metal plate and said back surface of the imaging device when said imaging device contacts said projected surface of said metal plate.

2. The device block according to claim 1, which further comprises a circuit board electrically connected to said imaging device, said circuit board being provided with an opening through which said projected surface of the metal plate passes so that said circuit board is disposed between said imaging device and said metal plate.

3. The device block according to claim 2, wherein said predetermined height is larger than the thickness of said circuit board.

4. The device block according to claim 2, wherein said circuit board comprises a flexible printed circuit board.

5. The device block according to claim 1, wherein said projected surface comprises a top surface of a portion protruded from said flat surface of the metal plate.

6. The device block according to claim 5, wherein said flat surface is provided with an opening corresponding to said at-least-one opening of said projected surface, and said protruded portion comprises a wall portion formed to surround said opening of the flat surface.

7. The device block according to claim 6, wherein said opening of the flat surface is of a quadrangular shape, and said wall portion comprises a quadrilateral wall.

8. The device block according to claim 2, wherein said projected surface comprises the top surface of a portion protruded from said flat surface of the metal plate, and said opening of the circuit board is set to be larger than

that of said protruded portion of the metal plate but smaller than that of said imaging device.

9. The device block according to claim 8, wherein said protruded portion comprises a quadrilateral wall portion, and said opening of the circuit board is of a square shape.

10. The device block according to claim 1, wherein the viscosity of said adhesive is 1 - 30 Pa·s.

11. The device block according to claim 10, wherein said adhesive comprises a ultraviolet curing adhesive.

12. A structure for mounting a solid-state imaging device on an optical unit, which comprises:

a metal plate having a flat surface, a backside surface opposite to said flat surface, a projected surface projected by a predetermined height from the flat surface, said projected surface being parallel to said flat surface, and at least one opening formed on said projected surface and accessible through said backside surface;

said solid-state imaging device having a front surface for receiving light and a back surface, said imaging device being secured to said metal plate by adhesive applied at least to a corner edge portion formed by the inner

circumferential surface of said at-least-one opening of the metal plate and said back surface of the imaging device when said imaging device contacts said projected surface of the metal plate; and

fixing members for fixing said metal plate carrying said imaging device thereon onto said optical unit.

13. The structure according to claim 12, which further comprises a circuit board electrically connected to said imaging device, said circuit board being provided with an opening through which said projected surface of the metal plate passes so that said circuit board is disposed between the imaging device and the metal plate, and wherein said predetermined height is larger than the thickness of said circuit board.

14. The structure according to claim 12, wherein said flat surface is provided with an opening corresponding to said at-least-one opening of said projected surface, and wherein said projected surface comprises the top surface of a wall portion formed to surround said opening of the flat surface.

15. The structure according to claim 13, wherein said projected surface comprises the top surface of a portion protruded from said flat surface of the metal plate, and

said opening of the circuit board is set to be larger than that of said protruded portion of the metal plate but smaller than that of said imaging device.

16. The structure according to claim 15, wherein said protruded portion comprises a quadrilateral wall portion, and said opening of the circuit board is of a square shape.

17. A method for mounting a solid-state imaging device on an optical unit, which comprises:

providing a metal plate having a flat surface, a backside surface opposite to said flat surface, a projected surface projected by a predetermined height from the flat surface, said projected surface being parallel to said flat surface, and at least one opening formed on said projected surface and accessible through said backside surface;

contacting the back surface of said solid-state imaging device to said projected surface of the metal plate so as to close said at-least-one opening;

anchoring said back surface to said projected surface by applying adhesive at least to a corner edge portion formed by the inner circumferential surface of said at-least-one opening of the metal plate and said back surface of the imaging device; and

fixing said metal plate carrying said imaging device

thereon onto said optical unit.

18. The method according to claim 17, which further comprises:

providing a circuit board having an opening through which said projected surface of the metal plate passes;

disposing said circuit board on said metal plate with allowing said projected surface to pass through said opening of the circuit board before contacting said imaging device to said metal plate so that the circuit board is held between said metal plate and said imaging device when said imaging device is secured to said metal plate; and

electrically connecting said imaging device with said circuit board.